



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,265	03/04/2002	Charles S. Zappala	10194.8041.US01	6538

54499 7590 12/20/2006
WOODCOCK & WASHBURN LLP
ONE LIBERTY PLACE
46TH FLOOR
PHILADELPHIA, PA 19103

EXAMINER

PHAN, HUY Q

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/090,265

Applicant(s)

ZAPPALA, CHARLES S.

Examiner

Huy Q. Phan

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 12-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on date: 11/14/2006.
Claims 6-11 and 23-25 are still pending.
Claims 1-5 and 12-22 are withdrawn.

Response to Arguments

2. a) Applicant's arguments with respect to the amended claims 6-8 have been fully considered but they are not persuasive.

Applicant argued that "the subscriber mobile stations of Karr do not have location devices inside the subscriber mobile units themselves" and the subscriber mobile station of Karr "does not include an internal location system to determine its own location". The examiner respectfully disagrees. Karr discloses that "It is possible to use the pilot channels of the active, candidate, neighboring and remaining sets, maintained in the target MS, for obtaining signal characteristic measurements (e.g., TOA and/or TDOA measurements) between the target MS 140 and the base stations in one or more of these sets. Based on such signal characteristic measurements and the speed of signal propagation, signal characteristic ranges or range differences related to the location of the target MS 140 can be calculated... Further, since such measurements and BS 122 positions can be sent either to the network or the target MS 140, location can be determined in either entity" (see [0448]-[0449]). Since, Karr discloses that the mobile station can determine its own location by using the pilot channels of the active,

candidate, neighboring and remaining sets, maintained in the target MS, for obtaining signal characteristic measurements (e.g., TOA and/or TDOA measurements) between the target MS 140 and the base stations in one or more of these sets; therefore the mobile station must have location device inside the mobile station itself.

b) Applicant's arguments with respect to claims 9-11 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Karr, Jr. et al. (US-2001/0022558 and herein after Karr).

Regarding claim 6, Karr discloses a subscriber handheld mobile telephone unit (fig. 4, MS 140) for use in a wireless communications network (fig. 4), the handheld mobile telephone unit comprising:

an operating system (“a transmitting device, and in most cases is also a wireless receiving device” see [0088]), including hardware and software that performs communications functions ([0088]-[0090]);

call quality data components (“the signal data measurements received from a given target MS” see [0096]) to determine at least one call quality metric ([0095]-[0100]); and

a location system (see [0088] and section 2a above), comprising hardware and software that determine a location of the handheld mobile unit in compliance with enhanced 911 requirements [0100], wherein the location system within the handheld mobile telephone unit carried by the subscriber ([0448]-[0449]);

receives a query originating from a mobile switch center (fig. 4, MSC 112) which communicates with a base station (fig. 4, BS 122), wherein the query includes a request for call data and location data [0224], wherein the location data comprises a location of the subscriber handheld mobile telephone unit in compliance with E911 requirements ([0100] and [0234]); and

transmits the location data and the call quality metric to the mobile switch center in response to the request [0224], wherein the location data and the call quality metric is for use in analyzing performance of the wireless communication network ([0104] also see [0095]-[0109]).

Regarding claim 7, Karr discloses the mobile unit of claim 6, wherein the location system includes global positioning system equipment [0769].

Regarding claim 8, Karr discloses the mobile unit of claim 6, further comprising a performance monitoring system that monitors and stores multiple network performance characteristic measurements ([0103]-[0104]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a) Claims 9 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson (WO 99/12228) in view of Karr (US-2001/0022558), and further in view of Martin (US-6,970,702).

Regarding claim 9, Watson discloses a method for analyzing a wireless communications network in real-time (fig. 2), comprising:

receiving performance monitoring criteria (fig. 3 and page 9);

using the performance monitoring criteria to query at least one subscriber handheld mobile telephone unit (fig. 2, 48 and page 7) in the wireless communication network (fig. 2);

receiving at least one response to the query, including call data and location data (fig. 8; page 13, lines 1-7);

creating a link between the call data and the location data (fig. 3 and page 9);

storing the call data, the location data, and the link in a server (fig. 5; page 11, lines 15-28);

accessing the server to retrieve the call data, the location data, and the links (page 11, lines 15-28);

using the call data, the location data and the links to create at least one performance report (page 11, lines 15-28), including a "report packet 70 preferably includes a graphical user interface (GUI) application to display test results and print reports" (fig. 3 and page 9), wherein the location is a location of a subscriber handheld mobile unit hand-carried by a subscriber with a resolution required by enhanced 911 ("E911") services (described as "the responder 42 provides geographic position information through use of the global positioning system"; see fig. 2, page 7, lines 24-30), and the time is a time at which the call data was created and at which the subscriber handheld mobile unit was in the location (fig. 9; page 8, lines 8-16).

But, Watson does not particularly show the handheld mobile telephone unit comprising a location system internal to the handheld mobile telephone unit. However in analogous art, Karr teaches the handheld mobile telephone unit comprising a location system internal to the handheld mobile telephone unit (see [0088], [0448]-[0449] and section 2a above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Watson as taught by Karr for the purpose of offering the handheld mobile telephone unit of capability in determining its own location.

But, Watson and Karr do not particularly show a graphical report that displays the call data as a function of location and time. However in analogous art, Martin teaches a graphical report that displays the call data as a function of location and time (see col. 1, lines 11-18; for more details see specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Watson and Karr as taught by Martin in order to provide "a single, easy to follow, graphical presentation of the captured call information, including geographic position, even though the switches or mobile telephone manufacturer's equipment from which the call monitor information is obtained might vary" (see col. 2, lines 53 onwards).

Regarding claim 23, Watson discloses a wireless communications system (fig. 2 and its description), comprising:

a subscriber handheld mobile telephone unit (fig. 2, 48 and page 7), wherein the handheld mobile telephone unit includes:

a performance monitoring means that records multiple network performance characteristics (fig. 3 and page 9); and

a location means (fig. 9; page 8, lines 8-16 and page 7) that creates location data describing a location of the handheld mobile unit with a resolution required by enhanced 911 services (described as "the responder 42 provides geographic position information through use of the global positioning system"; see fig. 2 and its description); and

a data processing means in communication with the handheld mobile unit (figs. 5-6), comprising, means for using the network performance characteristics and the

Art Unit: 2617

location data to create at least one performance report (fig. 3 and page 9), including a “report packet 70 preferably includes a graphical user interface (GUI) application to display test results and print reports” (fig. 3 and page 9), wherein the location is the location of the mobile telephone unit hand-carried by a subscriber at the time the network performance characteristics were recorded (fig. 9; page 8, lines 8-16).

But, Watson does not particularly show the location means being integrated to the handheld mobile telephone unit. However in analogous art, Karr teaches the location means being integrated to the handheld mobile telephone unit (see [0088], [0448]-[0449] and section 2a above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Watson as taught by Karr for the purpose of offering the handheld mobile telephone unit of capability in determining its own location.

But, Watson and Karr do not particularly show a graphical report that displays the call data as a function of location and time. However in analogous art, Martin teaches a graphical report that displays the call data as a function of location and time (see col. 1, lines 11-18; for more details see specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Watson and Karr as taught by Martin in order to provide “a single, easy to follow, graphical presentation of the captured call information, including geographic position, even though the switches or mobile telephone manufacturer's equipment from which the call monitor information is obtained might vary” (see col. 2, lines 53 onwards).

Regarding claim 24, Watson and Martin disclose the wireless communications system of claim 23. Watson further discloses wherein the data processing means further comprises: means for receiving performance monitoring criteria (fig. 3 and page 9); means for using the performance monitoring criteria to query the handheld mobile telephone unit (fig. 8; page 13, lines 1-7); and means for receiving a response to the query (fig. 8 and its description), wherein the response includes the network performance characteristics and the location data (fig. 9; page 8, lines 8-16).

Regarding claim 25, Watson and Martin disclose the wireless communications system of claim 23. Watson further discloses wherein the data processing means further comprises: means for creating a link (fig. 3 and page 9) between the network performance characteristics and the location data (fig. 9; page 8, lines 8-16); means for storing the network performance characteristics, the location data, and the link in a server (fig. 3 and page 9); and means for retrieving ("future analysis") the network performance characteristics and the location data (fig. 3 and page 9) in response to a request to create at least one performance report (fig. 9; page 8, lines 8-16).

b) Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson, Karr, and Martin in view of Kalliokulju (US-6,741,843).

Regarding claim 10, Watson, Karr and Martin disclose the method as recited in the rejection of claim 9. But, Watson, Karr and Martin do not particularly show automatically adjusting parameters of the wireless communications network based on

Art Unit: 2617

the at least one performance report and predetermined performance guidelines.

However in analogous art, Kalliokulju teach automatically (inherently for any operation without operator) adjusting parameters of the wireless communications network in responding the emergency call (col. 5, lines 1-8); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Watson, Karr and Martin as taught by Kalliokulju for purpose of improving advantageously the enhanced 911 service of communication system in order to "ensure that the pay service in question will be carried out successfully" (see Kalliokulju's specification col. 5, lines 1-8).

Regarding claim 11, Watson, Karr, Martin and Kalliokulju disclose the method as recited in the rejection of claim 10. Kalliokulju further discloses wherein the parameters include power settings of network components, and frequency assignments (col. 6, lines 42-65).

Conclusion

5. THIS ACTION IS MADE FINAL.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

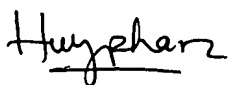
Art Unit: 2617

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 571-272-7924. The examiner can normally be reached on 8AM-6PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Examiner: Phan, Huy Q.

AU: 2617


GEORGE ENG -
SUPERVISORY PATENT EXAMINER
Date: 12/12/2006